



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,698	12/07/2006	Willibald Konrath	4015-5819	7114
24112	7590	08/05/2009	EXAMINER	
COATS & BENNETT, PLLC			KASENGE, CHARLES R	
1400 Crescent Green, Suite 300				
Cary, NC 27518			ART UNIT	PAPER NUMBER
			2121	
			MAIL DATE	DELIVERY MODE
			08/05/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/573,698	KONRATH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHARLES R. KASENGE	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 May 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 15-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 15, 17 and 21-34 is/are rejected.  
 7) Claim(s) 16 and 18-20 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 March 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>5/4/09</u> .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 5/8/09, with respect to the rejection(s) of claim(s) 15-27 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rampone et al. U.S. Patent 6,020,751.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Rampone et al. U.S. Patent 6,020,751.

4. Regarding claim 28, Rampone discloses a frequency-specific component for a high-frequency assembly comprising: a machine-detectable feature on the frequency-specific component; and the machine-detectable feature being disposed on the frequency-specific component to indicate a specific operating frequency of the component (Fig. 2, #204; pg. 3, lines 58-67).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15, 17, 21-26, 29-31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampone in view of Onitsuka U.S. Patent 6,618,937.

7. Regarding claims 15 and 29, Rampone discloses a method of manufacturing a high-frequency assembly having a plurality of components, at least one of which is frequency-specific, using an automatic assembly apparatus, the method comprising: identifying a frequency-encoding feature on a frequency-specific component (Fig. 2, #200; col. 3, lines 58-67); accepting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is a correct component for the assembly (Fig. 2, #216; col. 5, lines 7-16); and rejecting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is not the correct component for the assembly (Fig. 2, #214; col. 5, lines 7-16).

Regarding claim 15 and 29, Rampone does not expressly disclose a placing apparatus for placing a plurality of components on an assembly, including a frequency-specific component. Regarding claims 17, 30 and 31, Rampone does not expressly disclose determining a location/orientation.

Onitsuka discloses placing components which includes a frequency-specific component with an assembly apparatus (col. 1, lines 43-63). Regarding claims 17, 21, 30 and 31, Onitsuka discloses searching for the frequency-encoding feature at a plurality of locations on the frequency-specific component; and determining an orientation of the frequency-specific component based on a location at which the frequency-encoding feature is found in relation to a reference edge of the component (col. 7, lines 25-43). Regarding claim 34, Onitsuka discloses a sensor being a camera (col. 7, lines 25-43).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a placing apparatus to place components when assembling an electrical device and test the frequency specific component before placing it. One of ordinary skill in the art would have been motivated to do this since placing apparatuses are commonly used in the assembly of electronics.

Therefore, it would have been obvious to modify Rampone with Onitsuka to obtain the invention as specified in claims 15, 17, 21, 29-31 and 34.

Regarding claim 22, Rampone discloses the method wherein the frequency-specific component comprises a circuit board (col. 3, lines 58-67).

Regarding claim 23, Rampone discloses the method of claim 22 wherein the frequency-encoded feature comprises a conductive material (col. 3, lines 58-67, wherein conductive material is inherent to a circuit board with an operating frequency).

Regarding claim 24, Rampone discloses the method of claim 15 wherein the frequency-specific component comprises a mechanical component (col. 3, lines 58-67, wherein a plastic

cover over electronic component (processor, resistors, etc.) is a mechanical component).

Regarding claim 25, Rampone discloses the method of claim 24 wherein the mechanical component comprises a cover that covers a mounted component (col. 3, lines 58-67).

Regarding claim 26, Rampone inherently discloses the method of claim 15 wherein the frequency-encoded feature comprises a bore (col. 3, lines 58-67).

8. Claims 27, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rampone and Onitsuka as applied to the claims above, and further in view of Miyauchi et al. U.S. Patent 5,539,976.

9. Regarding claims 32 and 33, Rampone discloses using any suitable method to determine a frequency encoding feature (col. 3, lines 58-67), but does not expressly disclose optically identifying the feature. Rampone does not disclose the feature being printed on the component.

Miyauchi discloses printing an indication on a component (Fig. 3) and optically identifying the feature (Fig. 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a bar code system to determine a frequency encoding feature. One of ordinary skill in the art would have been motivated to do this since Rampone discloses using any suitable method.

Therefore, it would have been obvious to modify Rampone and Onitsuka with Miyauchi to obtain the invention as specified in claims 27, 32 and 33.

***Allowable Subject Matter***

10. Claims 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CK  
August 3, 2009

/Charles R Kasenge/  
Primary Examiner, Art Unit 2121